

AMENDMENTS TO THE CLAIMS

Claims 1-41 are pending in the instant application. The Applicant requests reconsideration of the claims in view of the following remarks.

Listing of claims:

1. (Previously Presented) In an integrated circuit wireless communication device having at least two wireless transceiver circuits, a method for coordinating potentially conflicting wireless communications, comprising:

assigning first and second priority indications to first and second wireless transceiver circuits, respectively, where each priority indication may be selected from a plurality of available priority indications;

receiving or transmitting data on the first wireless transceiver circuit in accordance with the relative priority of the first priority indication to the second priority indication;

detecting an application that is configured to receive or transmit data on the second wireless transceiver circuit;

assigning a third priority indication to the second wireless transceiver circuit when the predetermined application is detected; and

receiving or transmitting data on the second wireless transceiver circuit in accordance with a relative priority of the third priority indication to the first priority indication.

2. (Original) The method of claim 1, wherein the first wireless transceiver circuit comprises a MAC layer module that is directly coupled to a MAC layer module of the second wireless transceiver circuit such that a priority indication may be transferred between the MAC layer modules.

3. (Original) The method of claim 1, wherein the third priority indication is a maximum priority indication that is available from the plurality of available priority indications.

4. (Original) The method of claim 1, wherein the third priority indication is greater than the second priority indication.

5. (Original) The method of claim 1, wherein the second wireless transceiver circuit comprises a Bluetooth application, and the predetermined application comprises a Human Interface Device driver.

6. (Previously Presented) The method of claim 1, wherein the receiving or transmitting data on the second wireless transceiver circuit in accordance with the relative priority of the third priority indication to the first priority indication comprises receiving or transmitting data on the second wireless transceiver circuit if the third priority indication comprises a higher priority than the first priority indication.

7. (Original) The method of claim 1, wherein the first priority indication comprises a user-specified priority indication for the first wireless transceiver circuit, such that the first wireless transceiver circuit is given priority in the reception or transmission of data relative to the second wireless transceiver circuit.

8. (Original) The method of claim 1, wherein the first wireless transceiver circuit comprises a WLAN wireless interface device, and wherein the second wireless transceiver circuit comprises a Bluetooth wireless interface device.

9. (Original) The method of claim 1, wherein the first wireless transceiver circuit comprises a first Bluetooth wireless interface device, and wherein the second wireless transceiver circuit comprises a second Bluetooth wireless interface device.

10. (Original) The method of claim 1, wherein the first wireless transceiver circuit is compliant with Bluetooth and the second wireless transceiver circuit is compliant with IEEE 802.11(b) or IEEE 802.11(g).

11. (Original) An apparatus for coordinating wireless communications, comprising:

a first wireless interface circuit for performing receiving or transmitting operations of a first type of wireless communication having a first priority level selected from a first plurality of priority levels;

a second wireless interface circuit for performing receiving or transmitting operations of a second type of wireless communication having a second priority level selected from a second plurality of priority levels;

an interface coupling the first and second wireless interface circuits for transmitting priority levels between the first and second wireless interface circuits;
and

a controller for coordinating the operations of the first or second wireless interface circuits in relation to a relative priority of the first and second priority levels, said controller comprising priority level adjustment logic for adjusting a priority level in response to detecting a predetermined condition.

12. (Original) The apparatus of claim 11, wherein the first wireless transceiver circuit is compliant with Bluetooth and the second wireless transceiver circuit is compliant with IEEE 802.11.

13. (Original) The apparatus of claim 11, wherein the controller comprises a MAC layer module.

14. (Original) The apparatus of claim 11, wherein the controller comprises a first MAC layer module in the first wireless interface circuit and a second MAC layer module in the second wireless interface circuit.

15. (Original) The apparatus of claim 11, wherein the predetermined condition comprises a request to receive or transmit real time data over the second wireless interface circuit.

16. (Original) The apparatus of claim 11, wherein the predetermined condition comprises real-time human interface device (HID) traffic being transmitted or received on the second wireless interface circuit, and wherein the priority level adjustment logic increments the second priority level.

17. (Original) The apparatus of claim 11, wherein the predetermined condition comprises a user-specified priority level being entered for the second wireless interface circuit, and wherein the priority level adjustment logic increments the second priority level above the first priority level in response to detecting the user-specified priority level.

18. (Original) The apparatus of claim 11, wherein the predetermined condition comprises audio-video traffic being transmitted or received on the second wireless interface circuit, such that the controller protects the second wireless interface circuit from interference caused by the first wireless interface circuit by adjusting the second priority level to a maximum level and adjusting the first priority level to a minimum level.

19. (Original) An apparatus for implementing a dynamic collaboration protocol, comprising:

first means for sending or receiving a first wireless signal having a first allocated priority, comprising a first MAC layer module;

second means for sending or receiving a second wireless signal having a second allocated priority, comprising a second MAC layer module;

means for adjusting the second allocated priority to be higher than the first allocated priority if real-time human interface device (HID) traffic is detected on the second means; and

means for interfacing the first and second MAC layer modules to coordinate throughput performance of the first and second means such that whichever of the first or second means has a higher allocated priority is given higher throughput performance.

20. (Original) The apparatus of claim 19, wherein the second wireless signal comprises a packet signal, and wherein the means for adjusting the second allocated priority evaluates each packet of the packet signal to detect if real-time human interface device (HID) traffic is present on the second means.

21. (Previously Presented) A method for coordinating wireless communications, comprising:

assigning a first priority indication to a first wireless transceiver circuit and a second priority indication to a second wireless transceiver circuit, wherein said first wireless transceiver circuit and said second wireless transceiver circuit are integrated within a single wireless communication device; and

receiving or transmitting data via said first wireless transceiver circuit based on at least one of: said first priority indication and said second priority indication.

22. (Previously Presented) The method according to claim 21, wherein said first priority indication and said second priority indication are selected from a plurality of available priority indications.

23. (Previously Presented) The method according to claim 21, comprising:
detecting a predetermined application that is configured to receive or transmit data on said second wireless transceiver circuit;
assigning a third priority indication to said second wireless transceiver circuit when said predetermined application is detected; and
receiving or transmitting data on said second wireless transceiver circuit based on said third priority indication and said first priority indication.

24. (Previously Presented) The method of claim 21, wherein said first wireless transceiver circuit comprises a first MAC layer module that is directly coupled to a second MAC layer module of said second wireless transceiver circuit, such that a priority indication may be transferred between said first MAC layer module and said second The method according to claim layer module.

25. (Previously Presented) The method of claim 23, wherein said third priority indication is a maximum priority indication that is selected from a plurality of available priority indications.

26. (Previously Presented) The method of claim 23, wherein said third priority indication is greater than said second priority indication.

27. (Previously Presented) The method of claim 23, wherein said second wireless transceiver circuit comprises a Bluetooth application, and said predetermined application comprises a Human Interface Device driver.

28. (Previously Presented) The method of claim 23, wherein said receiving or transmitting data on said second wireless transceiver circuit based on said third priority indication and said first priority indication comprises receiving or transmitting data on said second wireless transceiver circuit, if said third priority indication comprises a higher priority than said first priority indication.

29. (Previously Presented) The method of claim 21, wherein said first priority indication comprises a user-specified priority indication for said first wireless transceiver circuit, such that said first wireless transceiver circuit is given

priority during said reception or transmission of data relative to said second wireless transceiver circuit.

30. (Previously Presented) The method of claim 21, wherein said first wireless transceiver circuit comprises a WLAN wireless interface device, and wherein said second wireless transceiver circuit comprises a Bluetooth wireless interface device.

31. (Previously Presented) The method of claim 21, wherein said first wireless transceiver circuit comprises a first Bluetooth wireless interface device, and wherein said second wireless transceiver circuit comprises a second Bluetooth wireless interface device.

32. (Previously Presented) The method of claim 21, wherein said first wireless transceiver circuit is compliant with Bluetooth and said second wireless transceiver circuit is compliant with IEEE 802.11(b) or IEEE 802.11(g).

33. (Previously Presented) An apparatus for coordinating wireless communications, comprising:

a first wireless interface circuit for performing receiving or transmitting operations of a first type of wireless communication having a first priority level selected from a first plurality of priority levels;

a second wireless interface circuit for performing receiving or transmitting operations of a second type of wireless communication having a second priority level selected from a second plurality of priority levels; and

an interface coupling said first wireless interface circuit and said second wireless interface circuit for transmitting one or more priority levels between said first wireless interface circuit and said second wireless interface circuit.

34. (Previously Presented) The apparatus of claim 33, comprising a controller for coordinating said operations of said first or second wireless interface circuits based on said first priority level and said second priority level, said controller comprising priority level adjustment logic for adjusting a priority level in response to detecting a predetermined condition.

35. (Previously Presented) The apparatus of claim 33, wherein said first wireless transceiver circuit is compliant with Bluetooth and said second wireless transceiver circuit is compliant with IEEE 802.11.

36. (Previously Presented) The apparatus of claim 34, wherein said controller comprises a MAC layer module.

37. (Previously Presented) The apparatus of claim 34, wherein said controller comprises a first MAC layer module in said first wireless interface circuit and a second MAC layer module in said second wireless interface circuit.

38. (Previously Presented) The apparatus of claim 34, wherein said predetermined condition comprises a request to receive or transmit real time data via said second wireless interface circuit.

39. (Previously Presented) The apparatus of claim 34, wherein said predetermined condition comprises real-time human interface device (HID) traffic being transmitted or received via said second wireless interface circuit, and wherein said priority level adjustment logic increments said second priority level.

40. (Previously Presented) The apparatus of claim 34, wherein said predetermined condition comprises a user-specified priority level being entered for said second wireless interface circuit and wherein said priority level adjustment logic increments said second priority level above said first priority level in response to detecting said user-specified priority level.

41. (Previously Presented) The apparatus of claim 34, wherein said predetermined condition comprises audio-video traffic being transmitted or received via said second wireless interface circuit, such that said controller protects said second wireless interface circuit from interference caused by said first wireless interface circuit by adjusting said second priority level to a maximum level and adjusting said first priority level to a minimum level.